



DEPARTMENT OF THE NAVY

COMMANDING OFFICER
TRAINING SQUADRON TWENTY-SEVEN (VT-27)
411 BATAAN ST SUITE A
CORPUS CHRISTI TX 78419-5245

VT-27INST 5420.13E

9 FEB 2011

TRAINING SQUADRON TWENTY-SEVEN INSTRUCTION 5420.13E

Subj: HUMAN FACTORS COUNCILS AND HUMAN FACTORS BOARDS

Ref: (a) CNATRAININST 5420.13E
(b) COMNAVAIRPACINST 5420.2B
(c) OPNAVINST 3750.6R

Encl: (1) Human Factors Assessment Guidelines
(2) Human Factors Council Meeting Worksheet
(3) Human Factors Board Meeting Worksheet
(4) Sample Human Factors Board Assignment Letter
(5) Human Factors Review and Interventions

1. Purpose. To establish a Human Factors Council (HFC) and Human Factors Board (HFB) as directed by references (a, b, & c) providing the Commanding Officer with an assessment of the Squadron's overall safety climate including potential concerns related to flight crew members performance in the training environment.

2. Cancellation. VT-27INST 5420.13D

3. Background. Human error continues to be a leading cause of mishaps within the Naval Air Force. In many instances, the factors cited as causal factors in a mishap were previously known to supervisors and peers, but remained unknown to the Commanding Officer. The insidious nature of many "human factors" dictate this area be reviewed on a recurring basis. Corrective measures taken at the command level will arrest undesirable trends; ensure personnel are properly trained, directed, or counseled; and minimize potential problems that adversely impact safety and operational readiness. The HFC shall normally be chaired by the Commanding Officer, utilizing enclosures (1, 2, & 5) as guidelines. The HFB shall provide an individual plan of action tailored to mitigate identified problems and successfully reintegrate the aircrewman back to full performance of assigned duties.

4. Membership.

a. Human Factors Council shall be chaired by the Commanding Officer, or Executive Officer in the Commanding Officer's absence. The minimum required membership consists of; Commanding Officer (or Executive Officer as stated above), Flight Surgeon (or Aeromedical Safety Officer), Aviation Safety School graduate, Operations or Training Officer, and other officers from the following list as directed:

9 FEB 2011

(1) Squadron Augment Unit Commanding Officer, Reserve Department Head, O4 or above Full Time Support Officer (for Reserve officers)

(2) Flight Leaders (for Student Military Aviators (SMA))

(3) Chaplain

(4) Any officer deemed necessary by the Commanding Officer.

b. Human Factors Board is usually chaired by the Executive Officer with required membership consisting of; Commanding Officer and/or Executive Officer, Aviation Safety Officer School graduate, Flight Surgeon, an experienced officer and any additional officers at the Commanding Officer's direction. Other members may include but not limited to:

(1) Operations Officer

(2) Training Officer

(3) Chaplain

(4) SMA on-wing instructor

(5) Flight Leader

5. Responsibilities.

a. Human Factors Council is a non-punitive forum. Those involved in the HFC shall:

(1) Evaluate every assigned aviator (instructor and student).

(2) Investigate all matters related to flight and ground safety and submit recommendations to minimize associated hazards. These matters include but are not limited to the following areas:

(a) Incidents of poor air discipline.

(b) Lack of professionalism or conformity with standard operating procedure.

(c) Maintenance of flight currency, proficiency, or training requirements.

(d) High tempo operations.

- (e) Human engineering deficiencies in equipment.
- (f) Lack or loss of aeronautical adaptability.
- (g) Inappropriate personal or professional behavior.
- (h) Hazardous conditions or situations.

(i) Personal or professional stressors of Instructor Pilot or Student Military Aviators that may adversely affect their performance. Examples would include, but are not limited to: (death of a close family member or friend, divorce, severe financial problems, etc.)

- (j) Detachment Operations.

(3) Review each mishap or safety violation to determine independently from the Aircraft Mishap Board if a human factor area was contributory.

- (4) Meet as required but at least quarterly.

(5) Record the minutes of each meeting if directed by the Commanding Officer. The minutes shall be submitted to the Commanding Officer as required. Copies of the minutes are discouraged due to the sensitive nature of the material.

b. Human Factors Board is a non-punitive forum. Using Enclosure 4, Commanding Officers shall convene a HFB to review all known factors potentially affecting the ability of an individual to perform aircrew responsibilities in a safe and efficient manner. The HFB objective is to focus on specific aviation issues, and recommend an appropriate course of action. Those involved in the HFB shall review the same areas as the HFC and any additional areas the Commanding Officer deems relevant. Counseling and medical evaluations may be scheduled and carried out at the direction of the HFB as a precursor to a Field Naval Aviator Evaluation Board. The HFB shall:

(1) Notify the individual that an HFB will be convened and identify specific problem areas to be considered.

- (2) Conduct a thorough review utilizing (Enclosures 3, & 5).

(3) Document performance deficiencies and recommend to the Commanding Officer an appropriate course of action.

6. Action.

a. Human Factors Council is not bound by normal rules of evidence and may consider and include in the minutes, if required, any matter of reasonable believability or authenticity that is relevant to the

situation. The council shall pay particular attention toward uncovering underlying medical, physiological, social, behavioral and psychological factors, which could adversely affect the Command and aircrew.

b. Human Factors Council shall make no recommendations that are disciplinary in nature. Due to the potentially sensitive nature of human factor issues, no committee member shall disclose any meeting agenda to other squadron personnel without the approval of the Commanding Officer.

7. Conclusion.

a. Detailed examination of sensitive personal or professional matters in a large group is neither intended or appropriate. When such matters arise, the Commanding Officer may defer detailed discussion to a more appropriate forum. The HFC is intended to be a preventative first step used to isolate and correct aircrew deficiencies. The HFB should provide a detailed evaluation and specific corrective actions to the Commanding Officer.


D. G. CASE

Distribution:
List I, II, III

9 FEB 2011

HUMAN FACTORS ASSESSMENT GUIDELIES

1. Purpose. This enclosure outlines suggested methods for conducting assessments of aviator risk factors during the course of conducting a Human Factors Council (HFC) or Human Factors Board (HFB) meeting. Information presented here is intended to be flexible and adaptive to meeting the unique requirements of a particular command, the individual, or a situation. All of the suggested assessment methods and intervention options identified are subject to be specific command's individual interpretation and application of techniques as deemed appropriate by the Commanding Officer and Command leadership. The guidelines discussed herein are in no way intended to supersede, replace, or dictate how any Commander should use his/her preferred practices and best judgment in handling individuals within their unit who may pose a risk to safe and effective performance to the command's mission.

2. Background. Studies conducted by the Naval Safety Center have shown that a majority of our aircraft mishaps are a consequence of "human error", and that the roots of human error mishaps can often be traced to a failure of an organization's established safeguards. We now have in place, through standardized procedures for flight qualification (NATOPS/SOP), Aircrew Coordination Training (ACT), Operational Risk Management (ORM), and Command Leadership, the means to monitor and assess performance of aircrews and make appropriate decisions to reduce risk associated with their performance of flight and mission tasks. The use of HFC and HFB are additional interventions against a possible aircraft mishap. Proper use of HFC/HFBs will assist the command in reducing mishap risk by providing a process that focuses on identifying and managing aviators who pose an unacceptable risk to successful performance of the Command's mission or to flight safety.

a. High-risk Aviator: An aviator who poses a greater than average risk because of persistent performance deficiencies, situational stress, medical condition, one who shows a history of poor judgment, or a pattern of high-risk taking behavior.

b. High-risk Categories: It is recognized that the determination of which, if any, of a command's aviators are at risk is a highly subjective judgment. The Human Factors Review and Interventions (Enclosure 5), was prepared to help simplify and guide the process of identifying specific areas of risk. This enclosure describes several aviator risk category, key characteristics of aviators in each risk category, and a convenient list of possible interventions to mitigate risk. Enclosure 5 is intended for use as a background reference, during the course of conducting HFC and HFB. They are to help identify and manage each of the five categories of aviator risk. The aviator risk categories, listed in (Enclosure 5) include: (1) Below average

(Enclosure 1)

9 FEB 2011

nugget or transition aviator, (b) Over-confident senior aviator, (c) Best Pilot, (d) Consistent poor performance, and (e) Over-stressed aviator.

3. Assessment Processes

a. Worksheet for HFC Meeting: Enclosure 2 is provided for use during the conduct of the HFC meeting. This worksheet includes a template for assessment of all aircrews on key areas of performance, as well as a list of critical indicators related to safety risk. During the conduct of an HFC, the council members should review the performance of all aviators in the unit or who are flying squadron aircraft and identify the presence of any of the critical indicators listed in (Enclosure 5). If performance deficiencies or critical indicators are identified, a recommended course of action shall be presented to the unit's Commanding Officer. It is expected that in most cases no formal actions may result as a consequence of the council's review, and that the broad range of options would be considered in the event of identifying performance deficiencies or critical indicators. Such decision actions may include, but are not limited to, creative scheduling, providing additional guidance and training, counseling, etc. In the event that the deficiency or indicator is severe, in the judgment of the council, a recommendation for referral to a Human Factors Board may be warranted.

b. Worksheet for Human Factors Board: Enclosure 3 is provided for use during the conduct of the Human Factors Board. This worksheet provides a template for assessing an aviator who has been referred to a board for review. The worksheet includes possible assessment areas, including items related to aviator performance, qualification progress, professional attitude, flight discipline, and/or aeromedical concerns. An optional rating scale for assessing an aviator in terms of hazard severity and mishap probability has also been incorporated.

9 FEB 2011

HUMAN FACTORS COUNCIL MEETING WORKSHEET

The HFC shall review personal and professional circumstances, and direct particular attention toward uncovering underlying medical, physiological, social, behavioral and/or psychological factors which could adversely affect aircrew performance. The HFC is convened only in the interest of aviation safety and shall make no recommendations which are disciplinary in nature.

During HFC deliberations, consideration shall be given current squadron OPTEMPO, workload, command communications and other factors which may influence aircrew performance and safety.

DATE: _____

MEMBERS PRESENT _____

1. Operations: Provide flight data or documentation as needed.

a. OPTEMPO: Is the squadron flying too much or too little?

b. Individual flight time summaries. Are aviators flying enough to maintain proficiency?

2. Training: Provide data to assess the following:

a. Aircraft qualifications and professional progress.

b. NATOPS/instrument/physiological/survival swims qualifications/upgrades. Is anyone about to lose qualifications?

3. All members should discuss the following as related to each individual:

a. Naval Aviation Skills and Qualification Progress:

b. Systems and Procedures Knowledge:

c. Aircrew Coordination Performance:

d. Professional Discipline: Maturity and Work Habits

e. Risk-taking Behavior:

f. Career Development and Other Job Performance Factors:

4. Critical Indicators:

a. Declining performance: Failure to meet required standards or qualification progress:

b. Known violations or instances of poor flight discipline:

9 FEB 2011

c. Presence of major life or job stressors:

d. Classified as High-risk aviator as outlined in (Enclosure 5):

5. Recommended action. (The HFC shall make no recommendations which are disciplinary in nature.)

9 FEB 2011

HUMAN FACTORS BOARD WORKSHEET

Individual _____ Date Review _____

Specific Reason for HFB _____

1. AVIATOR PERFORMANCE AND QUALIFICATION PROGRESS:

Factors Considered in Assessment:

- General Aviation Skills
- Systems Knowledge and Procedures
- Aircrew Coordination Performance
- Professional Discipline
(Adherence to standards, maturity, and work habits)
- Career Development and Other Job Performance Factors

	1	2	3	4	5
HAZARD Assessment:	Negligible	Minor	Moderate	Serious	Critical

	1	2	3	4
MISHAP Probability:	Unlikely	Low	Medium	High

Comments: _____

2. AEROMEDICAL CONCERNS

Factors Considered in Assessment:

- Health and Fitness (Flight Surgeon Input)
- Job-Related Stressors
- Personal-life Stressors

	1	2	3	4	5
HAZARD Assessment:	Negligible	Minor	Moderate	Serious	Critical

	1	2	3	4
MISHAP Probability:	Unlikely	Low	Medium	High

Comments: _____

3. Other considerations or concerns: _____

4. Summary of Findings: _____

5. Recommendations to Commanding Officer: _____

9 FEB 2011

SAMPLE HUMAN FACTORS BOARD ASSIGNMENT LETTER

3750
Ser 00/
Date

From: Commanding Officer, Training Squadron TWENTY-SEVEN
To: CDR Justin (NMN) Case, USN, XXX-XX-1111/1310

Subj: **HUMAN FACTORS BOARD ICO LT DUSTIN D. WIND, USN,
XXX-XX-1111/1310**

Ref: (a) VT-27 INST 5420.13D

1. Per reference (a), you are hereby directed to conduct a Human Factors Board in consideration of LT Dustin D. Wind. Composition of the Board will be as follows:

CDR Justin Case, Senior Member
LCDR Henry T. Smith, (Squadron)
LT Michael N. Jones, Flight Surgeon
LT Jo Leader, (Squadron)

2. Using Enclosure (1), (3), and (5) of reference (a), you will conduct a thorough investigation into any human factors which may be affecting this aircrew's performance. Specifically, the Board shall exhaust every effort to address the following concerns: (specific areas of concern should be listed here)

3. Using Enclosure (3) of reference (a), the Board shall submit recommendations for corrective action, and forward a report to me no later than dd month yy.

J. J. SKIPPER

(Enclosure 4)

9 FEB 2011

HUMAN FACTORS REVIEW AND INTERVENTIONS

AVIATION RISK CATEGORY	KEY CHARACTERISTICS	POSSIBLE INTERVENTIONS
A. BELOW AVERAGE NUGGET OR TRANSITION AVIATOR	<ol style="list-style-type: none"> 1. Behind peers in progression. 2. Fails NATOPS exams or check rides. 3. Poor knowledge of procedures. 4. Lacks flying skills or mission proficiency. 5. Shows poor headwork or judgment. 6. Lacks confidence in ability. 7. Weak aircrew coordination skills. 	<ul style="list-style-type: none"> - Give remedial training in weak areas. - Move back in training syllabus. - Selectively schedule. - Crew with best teacher not best aviator. - Minimize collateral duties. - Counsel and document performance trends. - Provide candid, but constructive debriefs. - Recommend for Human Factors Board, or FNAEB. - Return to FRS.
B. OVERCONFIDENT SENIOR AVIATOR	<ol style="list-style-type: none"> 1. Has been out of cockpit, or is not flying enough. 2. Has "been there-done that" attitude. 3. Relies on experience instead of proficiency. 4. Does not adhere to NATOPS or standards. 5. Uses rank inappropriately to "bend" the rules. 6. Fails to recognize own limits. 7. Intimidates cockpit crew. 8. Poor aircrew coordination. 	<ul style="list-style-type: none"> - CO confront and counsel. - Closely monitor progression. - Crew with senior aviators. - Clarify adherence to standard procedures. - Provide additional flight time. - Document progress. - Refer to higher authority. - Provide aircrew coordination training review.

9 FEB 2011

AVIATION RISK CATEGORY	KEY CHARACTERISTICS	POSSIBLE INTERVENTIONS
c. "BEST PILOT/ AVIATOR/AIRCREWMAN"	<ol style="list-style-type: none"> 1. Typical "good stick", but over estimates ability. 2. May be highly regarded by command and peers. 3. Consistently pushes the aircraft envelope. 4. Completes mission at "any" cost. 5. Lacks judgment and accurate perception of mission risks. 6. Violates NATOPS/SOP. 7. Thinks rules apply only to the "average" aviator. 8. Talks down to other pilots. 9. Prefers high risk missions and condition to preserve best pilot image. 10. Low regard for aircrew coordination, takes minimum input from other aircrew. 	<ul style="list-style-type: none"> - CO confront and counsel. - Clarify and enforce standards. - Promote peer accountability. - Restrict flights, or ground for temporary period. - Suspend qualifications. - Closely supervise and monitor. - Document progress. - Refer to Human Factors Board or ENAEFB. - Provide aircrew coordination review.

9 FEB 2011

AVIATION RISK CATEGORY	KEY CHARACTERISTICS	POSSIBLE INTERVENTIONS
D. CONSISTENT POOR PERFORMER	<ol style="list-style-type: none"> 1. History of below Average performance. 2. May be well liked and excel at ground duties. 3. Barely meets, or shows slow qualification progress. 4. High rate of flight snivels. 5. Easily distracted and task overloaded. 6. Frequently suffers loss of situational awareness. 7. Does not seem to improve, or come up to peer level. 8. Usually behind peers in progression. 9. Lacks self-confidence. 10. Excess dependence on other aircrew members. 	<ul style="list-style-type: none"> - Provide candid critique and requirements to improve. - Close supervision and performance monitoring. - Set achievable standards and performance goals. - Provide remedial training and defined time to improve. - Crew with experienced and best instructors. - Selective scheduling. - Refer to Human Factors Board or FNAEB.

AVIATION RISK CATEGORY	KEY CHARACTERISTICS	POSSIBLE INTERVENTIONS
<p>E. OVERSTRESSED AVIATOR</p>	<ol style="list-style-type: none"> 1. Presence of major stressors, such as death of close family member or friend, recent divorce, failed relationship, serious financial setback, job performance problems, etc. 2. Noticeable change in mood or personality. 3. Frequent, out of proportion, anger, resentment, hostility. 4. Distracted, mentally pre-occupied, loss of focus. 5. Uncharacteristic breakdown of flight discipline/intentional violations. 6. High rate of flight snivels. 7. Excess alcohol use. 	<ul style="list-style-type: none"> - Identify and address source of stress. - Command counseling. - Flight surgeon review. - Selective scheduling - Close supervision and monitoring. - Temporary grounding/flight restrictions. - Reduce job workload and stress. - Send to family services or stress management clinic. - Refer to Human Factors Board.